

REMARKS

Claims 1-14 are currently pending in the application. The Office has rejected Claims 1, 5, 7-9 and 13 and has objected to Claims 2-4, 6, 10-12 and 14. Applicants note with appreciation the indication that claims 2-4, 6, 10-12 and 14 contain allowable subject matter.

The Office has rejected Claims 1, 5, 7-9 and 13 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2004/0061710 (Messing, et al., hereinafter "Messing") in light of either U.S. Patent 5,280,347 (Shiraishi, et al., herein after "Shiraishi") or U.S. Patent 6,882,364 (Inuiya, et al., hereinafter "Inuiya").

The Office states that all elements of the rejected claims are disclosed by Messing except (a) a scaling filter; and (b) a rhombus-shaped consideration area. The Office further states that the scaling filter is well known in the art and therefore would have been obvious.

With respect to the rhombus-shaped consideration area, the Office states that Shiraishi discloses a delta-structured sub-pixel arrangement and rhombus-shaped color filter at Figures 7, 11 and 27 and in column 15, lines 4-21. With respect to Shiraishi, the Applicants first respectfully submit that it is inappropriate to combine Shiraishi with Messing to render the present invention obvious. The present invention deals with an image rendering technology for displaying images while Shiraishi deals with an image scanning technology for inputting existing images. The Applicants respectfully submit that there is no motivation in the prior art or within either of these references to combine the scanning technology with the display technology to render the present invention obvious and, further, that there is no

motivation expressed in either reference suggesting that the scanning technology could be applied to image rendering.

Further, the Applicants are in disagreement with the Office in that the Office states that Shiraishi discloses a rhombus-shaped consideration area. First, the delta arrangement shown in Figures 7 and 11 of Shiraishi represents an arrangement of color filters, not an arrangement of sub-pixels within a pixel on an image display. Second, the Office states that Figure 27 and lines 4-21 of column 15 disclose the rhombus-shaped consideration area. However, the Applicants respectfully submit that Figure 27 and the cited passage shows the sampling structure of both the luminance signal and the color signal of the arrangement shown in Figures 7 and 11. Shiraishi states, in column 15, the following regarding the color sampling structure:

With regards to the color signals, it is found that M_g in FIG. 7, for example, also has the offset sampling structure in which the horizontal and vertical pitches are $2P_h$ and $2P_v$ respectively, and the horizontal offset amount is P_h . *Therefore the sampling structures of the color signals is represented by the mark □ in FIG. 27.*

As a result, an optical low pass filter optimum for preventing color moires should be such that its frequency characteristics become zero or minimum near four sides of a rhombus indicated by solid lines in FIG. 27. (emphasis added)

Per the above passage, it can be seen that the sampling structure is actually square shaped as indicated by the four square symbols in FIG. 27, which form the corners of the sampling square. The rhombus shape merely indicates the boundaries of the area where the low pass filter frequency characteristics become zero or are at a minimum near the sides thereof. As a result, the Applicants respectfully submit that Shiraishi does not show a rhombus-shaped consideration area, but instead shows a square shaped sampling area for scanning images using

a delta shaped filter arrangement. As a result, the combination of Shiraishi and Messing does not suggest or teach the present invention.

The Office further states that Inuiya discloses in Figures 6, 7a and 7b a square-shaped filter rotated by 45 degrees such that it becomes a rhombus-shaped filter. This is described in column 10, lines 16-26.

With respect to Inuiya, the Applicants respectfully submit that it is improper to combine this reference with Messing to render the presently claimed invention obvious. The presently claimed invention deals with a technology to render an image on a display device while Inuiya deals with technology to capture images from a digital still camera or digital video camera. The technology applicable to the capturing of images in a digital still or digital video camera is not applicable to the presently claimed invention for displaying images. As such, there is no teaching in either reference that would suggest combining the references and as a result, the Applicants respectfully submit that the application of the Inuiya reference to the present invention is improper, and that it is improper to apply image capture technology to the art of image rendering and display.

Furthermore, the Applicants respectfully submit that the Inuiya reference does not disclose a rhombus-shaped consideration area. The passage cited by the Office in column 10, lines 16-26 suggests a configuration of apertures through which photosensitive devices are filtered to obtain the capture of the digital image from the camera. The reference suggests arranging the apertures in a square lattice configuration, which can be rotated to suggest a rhombic configuration. However, this arrangement of apertures has no connection whatsoever to the rhombus-shaped consideration area used for determining the value of a sub-pixel in a graphic

output display as claimed in the present application. As a result, the Applicants believe that the rejection based on a combination of Messing and Inuiya has been traversed.

Conclusion

The Applicants have provided reasoned arguments as to why the combination of Messing with either Shiraishi or Inuiya is improper because of the difference in the technologies involved and, in addition, have shown how the rhombus-shaped objects in Shiraishi and Inuiya are not consideration areas as discussed in the present application. As a result, the Applicants respectfully request reconsideration of all currently pending claims in light of these remarks and request allowance of those claims at the earliest possible time.

It is believed that this Response and Amendment requires no fee. However, if a fee is required for any reason, please charge Deposit Account No. 02-4800 the necessary amount.

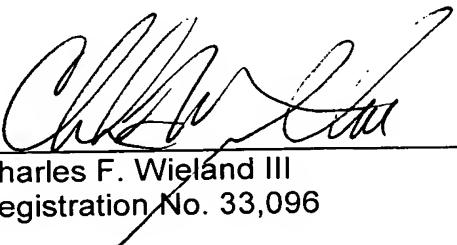
Should the Office have any questions regarding these amendments or arguments, the Applicant requests that the Office contact the Applicant's attorney, listed below.

Respectfully submitted,

BUCHANAN INGERSOLL PC

Date: January 17, 2006

By:



Charles F. Wieland III
Registration No. 33,096

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620